Identifying Performance Improvement
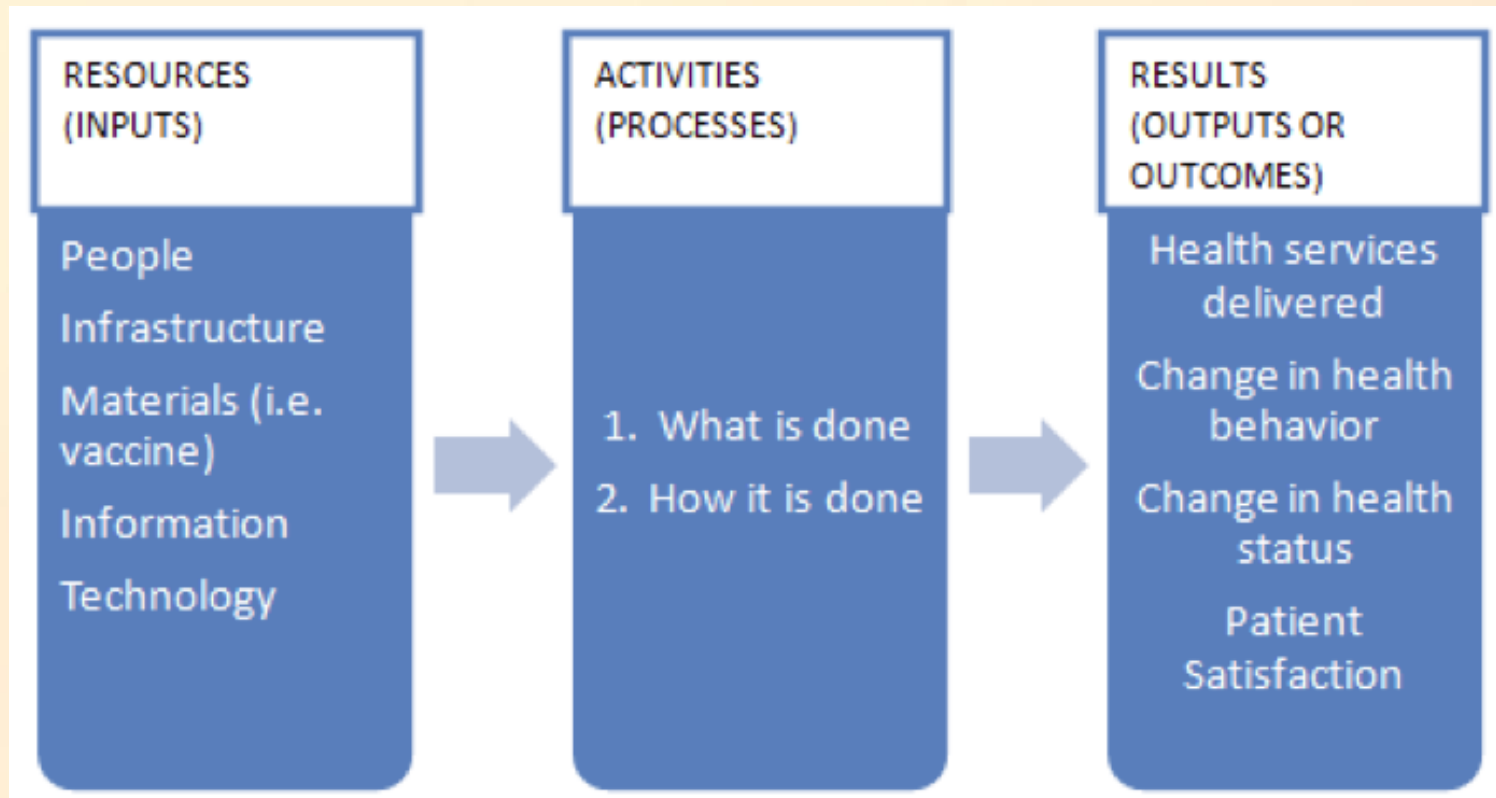
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What Is PI?

- Performance is defined by an organization's efficiency and outcome of care
- Quality is linked to an organization's service delivery approach or underlying system of care
- Performance improvement changes an organization's current system of care to improve outcomes of care
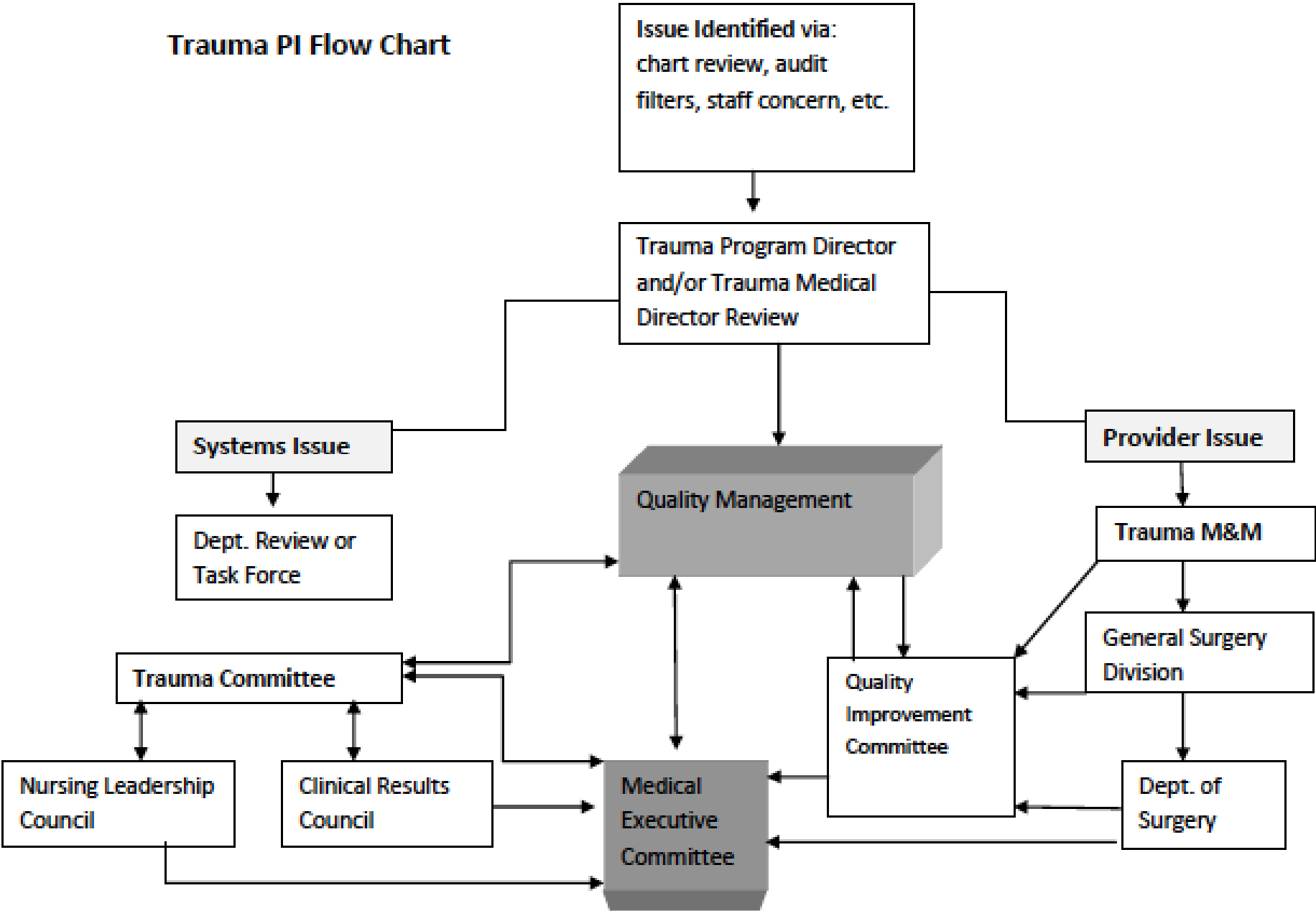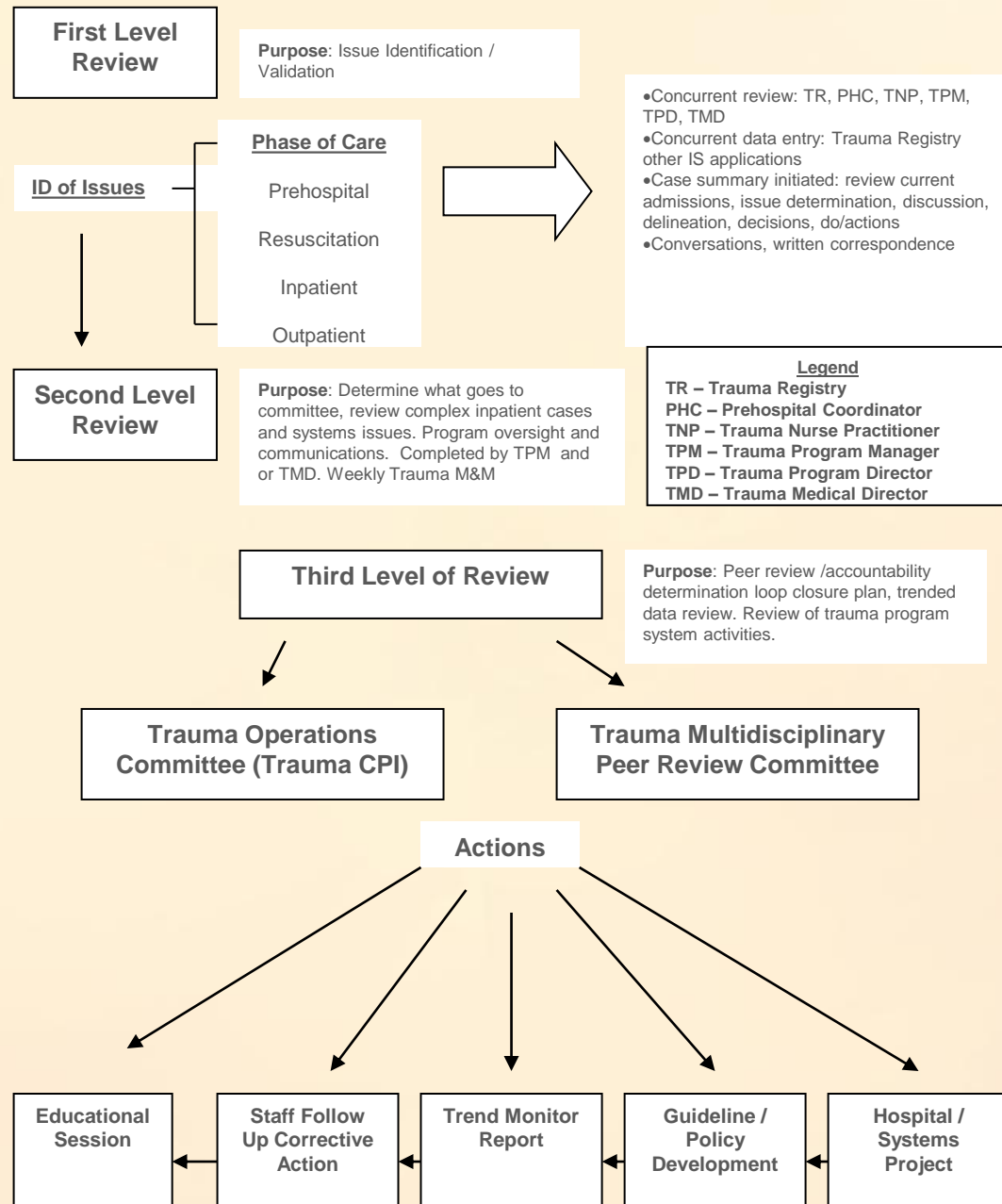
TIP #1
Develop your process map

- Tool to understand your organization's processes
- Provides a visual diagram of a sequence of events that results in a particular outcome

Trauma PI Flow Chart

Issue Identified via: chart review, audit filters, staff concern, etc.

→ Trauma Program Director and/or Trauma Medical Director Review

Systems Issue → Dept. Review or Task Force

Provider Issue → Trauma M&M

Quality Management

Quality Improvement Committee

General Surgery Division

Dept. of Surgery

Trauma Committee

Nursing Leadership Council

Clinical Results Council

Medical Executive Committee

First Level Review

Purpose: Issue Identification / Validation

ID of Issues

Phase of Care

Prehospital

Resuscitation

Inpatient

Outpatient

- Concurrent review: TR, PHC, TNP, TPM, TPD, TMD
- Concurrent data entry: Trauma Registry other IS applications
- Case summary initiated: review current admissions, issue determination, discussion, delineation, decisions, do/actions
- Conversations, written correspondence

Legend
TR – Trauma Registry
PHC – Prehospital Coordinator
TNP – Trauma Nurse Practitioner
TPM – Trauma Program Manager
TPD – Trauma Program Director
TMD – Trauma Medical Director

Second Level Review

Purpose: Determine what goes to committee, review complex inpatient cases and systems issues. Program oversight and communications. Completed by TPM and or TMD. Weekly Trauma M&M

Third Level of Review

Purpose: Peer review /accountability determination loop closure plan, trended data review. Review of trauma program system activities.

Trauma Operations Committee (Trauma CPI)

Trauma Multidisciplinary Peer Review Committee

Actions

Educational Session

Staff Follow Up Corrective Action

Trend Monitor Report

Guideline / Policy Development

Hospital / Systems Project

TIP #2
Must understand own delivery system and key processes

- Ask two questions:
  - What is done (what care is provided)?
  - How is it done (when, where, and by whom care is being delivered)?
- One of these components must be addressed to improve care
- Ideally both are addressed

TIP #2
Example

- Trauma Activation/Notification
  - What is done (what care is provided)?
  - How is it done (when, where, and by whom care is being delivered)?

What is the Desired Outcome?

- What are the funding agency's expectations?
- What are the regulatory requirements?
- What are the patients' issues and concerns?
- What are the leadership's priorities?

Outcomes Need to Be…

- Relevant
- Measurable
- Accurate
- Feasible

Focused on Patients

- Important measure of quality: extent the patient's needs are met
- Can include:
  - Systems that affect patient access
  - Care that is evidence-based
  - Patient Safety
  - Support of Patient engagement
  - Coordination of Care
  - Patient-centered communication

Focused on Teamwork

- Needed when process or system is complex
- No one knows it all
- Patient care involves more than one discipline
- Creativity is needed
- Staff buy-in is essential

Key Staff for PI Collection

- Day to day leader
- Data entry person (registrar)
  - TIP: Have a back-up person
- Provider champion
- Administrator (operations muscle)
- Data specialist
- Any staff member wanting to improve a process

Focused on Data

- Data:
  - Shows how a system is working
  - Separates what is thought from actual
  - Provides a baseline
  - Reduces ineffective solutions
  - Allows for monitoring of changes
  - Allows comparisons of practice settings
- Quantitative (numbers)-Qualitative (descriptive)
- Use what your organization is gathering
- Develop performance measures (focus on trauma)

Concepts for Identifying PI

- Performance Measure: derived from practice guidelines
  - Monitoring of vital signs
  - Monitoring of I&O
- Performance Measurement: Monitoring important aspects of program
  - Patient transfers
  - Financial data
- Performance Management: Setting goals and checking progress
  - Benchmarking

How Do I Get My Measure?

Example

1. Define the measure
2. Define measurement population
3. Set the denominator
4. Set the numerator
5. Divide numerator by denominator

1. Documentation of hourly vital signs on highest level activation
2. Highest level activation patients
3. 20
4. 10
5. 10/20=50%

Collecting PI

- What information needs to be collected for my measure?
  - Trauma registry
- What are my data sources?
  - Patient's chart including autopsy reports
  - Staff (rounding)
  - Conferences
  - Hospital quality department (RM reporting system)
- How should I collect it (methodology)?
  - PI Indicators/Audit Filters
  - Staff interviews
  - Focus groups
  - Chart audits
- How much should I collect?
- What is my timeline?
  - Available resources

Medical Record Review

Healthcare Facility: **Surveyor:**

Survey Date: **Chart Category:**

MR#:		Age:	Disposition:	Admit Transfer Died	Treat/Release	AMA
Mode of Arrival:		Sex:	Location: OR ICU	Floor Morgue	Other	
Mechanism of Injury:			Comments:			

Pre-Hospital Information

EMS Run Sheet Present:		Scene Time:	Transport Time:
BP:	Resp:	RTS: C-Collar	CPR Intubation
Pulse:	GCS:	Extrication Spinal Immob:	Oxygen IV started

ED/Physician Performance

Trauma Team Activated? Yes No		
ED Arrival Time:	ED Discharge Time:	ED LOS:
ED Physician Notified:	Trauma Surgeon Notified:	Orthopedics Notified:
ED Physician Arrived:	Trauma Surgeon Arrived:	Orthopedics Arrived:
Admitted to: Trauma/General Surgeon Orthopedics Neurosurgery Other Surgical Non-Surgical Service		
If Transferred: Receiving Facility:		Time of Transfer:

ED Documentation

Trauma Flow Sheet Used			Serial Vital Signs			
Initial ED Vital Signs	BP:	Pulse:	Resp:	Temp:	GCS:	SaO2:
Final ED Vital Signs	BP:	Pulse:	Resp:	Temp:	GCS:	SaO2:

Treatment

IV:	Crystalloid infused: cc	Central Line Placement:
Blood T&C:	Transfused: Units	Chest Tube:
Oxygen:	NG/OG Tube:	Foley:
C-spine clearance:		

Diagnostics

Plain Films:			CT Scans:					
Chest	Yes	No	Head	Yes	No	Chest	Yes	No
C-Spine	Yes	No	Facial Bones	Yes	No	Abdomen	Yes	No
Pelvis	Yes	No	Cervical Spine	Yes	No	Pelvic	Yes	No
Extremity films	Yes	No	Other Diagnostic Studies:					

Documented Injuries

	ISS

Operative Care

Operative Care Timely:	Operative Care Appropriate:	Unanticipated Return to OR:
Operative Care Concerns:		

QI Process

Reviewed by Trauma Coordinator:	Reviewed by Trauma Director:	M/M Review:
QI Issues Identified by Trauma Program	Loop Closed?	QI Issues NOT Identified by Trauma Program
_____	_____	
_____	_____	
_____	_____	
_____	_____	

Recommendation by Reviewer:	**Meets the Standard of Care?**

Common Areas To Find PI

- Prehospital
- Resuscitation
- Radiology
- Blood
- OR
- PACU
- ICU
- Step Down Unit
- Coordination of Care between services

PI Indicator Examples

- Appropriateness of Triage
- Appropriateness and legibility of documentation
- Lab TAT
- Radiology TAT
- Readmission to ICU
- Length of Stay
- Variations from Practice Management Guidelines (PMG)
- Delays in care:
  - Assessment
  - Diagnosis
  - Treatment
  - Consultation

Audit Filter Examples

- Laparotomy performed greater than 2 hours of arrival in hypotensive patient
- Craniotomy greater than 4 hours after arrival
- Non-surgical admission
- Absence of hourly vital signs
- Availability of prehospital run sheet
- Death
- Transfer
- Reintubation 48 hours after extubation
- Scene time greater than 20 minutes
- ED Dwell time greater than 2 hours prior to transfer

Concurrent Identification

Advantages

- Impacts patient at point of service
- Increased staff satisfaction
- Less reliant on medical record
- Accuracy improved

Disadvantages

- Requires intense resources
- Management of Data
- Access to medical record (paper charts)
- Real time documentation needed

Retrospective Identification

Advantages
- Completed all at one time
- Easier for limited resources
- Streamlined data entry

Disadvantages
- Reliant on Medical Records Dept
- Not timely
- Less effective feedback
- Data backlogging
- Lost data if not documented

Applying Your New Knowledge
Group Forum